PROJECT DESCRIPTION

I. GENERAL

This project involes the installation of a new traffic control signal at the intersection of MD 355 (Rockville Pike) at the ramp from the I-495 inner loop. This project also includes the installation of traffic signal interconnect from the new signal to the MD 355 at Pooks Hill intersection. This project is located in Montgomery County.

II. INTERSECTION OPERATION

The intersection shall operate in a NEMA 2-phase, full-traffic-actuated mode.

III. CONTROLLER REQUIREMENTS

A fully-traffic-actuated eight phase traffic signal controller with a video detection system, LAU, detector rack, loop detector amplifiers housed in a NEMA size "6" base mounted cabinet.

IV. SPECIAL NOTES

It is the responsibility of the contractor to confirm geometrics prior to placing signal equipment.

Upon completion of this project the contractor shall notify Mr. Robert Snyder of SHA at 410-787-7635 to arrange for the phone line installation. The contractor is to provide Mr. Snyder with the nearest street address, ZIP code, and telephone number.

SPECIAL NOTES

1. THE FOLLOWING CONTACT PERSONS FOR THIS PROJECT ARE AS FOLLOWS:

DISTRICT 3:

MR. LEE STARKLOFF, ASSISTANT DISTRICT ENGINEER - TRAFFIC PHONE: (301) 513-7358

MR. DENNIS MCMAHON, ASSISTANT DISTRICT ENGINEER - CONSTRUCTION PHONE: (301) 513-7336

MR. WAYNE MOWDY, ASSISTANT DISTRICT ENGINEER- MAINTENANCE PHONE: (301) 513-7304

MR. AUGIE REBISH, UTILITY ENGINEER PHONE: (301) 513-7350

OFFICE OF TRAFFIC AND SAFETY:

MR. RICHARD L. DAFF, SR. CHIEF TRAFFIC OPERATIONS DIVISION PHONE: (410) 787-7630

MR. ED RODENHIZER, SIGNAL OPERATIONS

PHONE: (410) 787-7652

MR. SONNY BAILEY, SIGN OPERATIONS

PHONE: (410) 787-7676

MR. MIKE STOCKER, SIGNAL SHOP WAREHOUSE

PHONE: (410) 787-7696

MONTGOMERY COUNTY:

DR. WILHELM DERMINASSIAN, MONTGOMERY COUNTY TMC PHONE: (240) 777-8795

A. EQUIPMENT TO BE FURNISHED BY STATE HIGHWAY ADMINISTRATION

EA 4 CHANNEL DETECTOR AMPLIFIER
EA CONTROLLER ASC II WITH TELEMETRY
EA CONTROLLER CABINET, SIZE 6
EA VIDEO DETECTION INTERFACE EQUIPMENT: 1-4 CAMERAS
SF SHEET ALUMINUM GROUND MOUNTED SIGN
E

SHEET ALUMINUM SIGNS TO CONSIST OF:

4 EA W3-3 36"x36" - GROUND MOUNT

4 EA D95-25 24"X24" - GROUND MOUNT

B. EQUIPMENT TO BE FURNISHED AND/OR INSTALLED BY CONTRACTOR

ITEM NO.	QUANTITY	DESCRIPTION J,K-	<u></u> L
1001	2 EA	MAINTENANCE OF TRAFFIC	
2002	3 CY	TEST PIT EXCAVATION	
5006	75 LF	24 INCH HEAT APPLIED WHITE PERMANENT	<u> </u>
		PREFORMED THERMOPLASTIC PAVEMENT MARKINGS	
8001	8 CY	CONCRETE FOUNDATION	
8013	1 EA	CONTROL CABLE, 100 FOOT VIDEO DETECTION CAMERA TO CONTROLLER	
8015	1 EA	CONTROL CABLE, 300 FOOT VIDEO DETECTION CAMERA TO CONTROLLER	
8029	LS	REMOVE AND DISPOSE OF MATERIAL AND EQUIPMENT A,B,C,D,E	_
8042	65 LF	WOOD SIGN SUPPORTS 4 INCH X 4 INCH	
8044	375 LF	NO. 6 AWG STRANDED BARE COPPER GROUND WIRE	
8049	130 LF	3 INCH SCHEDULE 80 RIGID PVC CONDUIT-BORED	
8050	325 LF	4 INCH SCHEDULE 80 RIGID PVC CONDUIT-BORED	_
8051	60 LF	2 INCH SCHEDULE 80 RIGID PVC CONDUIT-TRENCHED	_
8052	455 LF	3 INCH SCHEDULE 80 RIGID PVC CONDUIT-TRENCHED	
8053	685 LF	4 INCH SCHEDULE 80 RIGID PVC CONDUIT-TRENCHED	
8057	10 LF	1 INCH LIQUID TIGHT FLEXIBLE NON-METALLIC CONDUIT FOR DETECTOR SLEEVE	
8059	2 EA	ELEC. UTILITY SERVICE EQUIPMENT 120/240 VOLTS 60 AMPS (200 AMP METER SOCKET) J	
8061	900 LF	ELECTRICAL CABLE 1-CONDUCTOR NO. 4 AWG THHN/THWN	
8063	1 EA	MICROLOOP PROBE, 500 FOOT LEAD IN CABLE	_
8067	13 EA	FURNISH AND INSTALL ELECTRICAL HANDHOLE	
8069	52 SF	INSTALL GROUND MOUNTED SIGN	-
8071	2 EA	VIDEO DETECTION CAMERA	_
8077	2 EA	STEEL POLE WITH A SINGLE 50 FOOT MAST ARM	
8091	6 EA	GROUND ROD - 3/4 INCH DIAMETER X 10 FOOT LENGTH	_
8093	15 EA	12 INCH VEHICULAR TRAFFIC SIGNAL HEAD SECTION PS	
8101	385 LF	ELECTRICAL CABLE - 5 CONDUCTOR (ND. 14 AWG)	
8105	20 LF	SAW CUT FOR SIGNAL (LOOP DETECTOR)	
8112	1 EA	INSTALL CONTROLLER AND CABINET - BASE MOUNT	
NEG.	900 LF	50-PAIR COMMUNICATION CABLE, JELLYFILLED, UNDERGROUND	
NEG.	500 LF	250 KCMIL CABLE	

C. MATERIAL TO BE REMOVED AND RETURNED TO SHA

NONE

PHASE CHART

1	2	3	4	5
R Y G	R Y G	R Y G	R Y G	R Y G

Phase 2	G	G	G	R	R	
2 Change	Y	Y	Υ	R	R	──►
Phase 4	R	R	R	G	G	#
4 Change	R	R	R	Y	Υ	
Flashing	FL/Y	FL/Y	FL/Y	FL/R	FL/R	
Operation	,		I*L/		FL/N	×

WIRING KEY

5-CONDUCTOR ELECTRICAL CABLE A,B,C,D,E -

(No. 14 AWG)

A.E.F.G.H.J WIRING DIAGRAM

_A,F,J

E,G,J-

VIDEO DETECTION CONTROL CABLE

----- A, E, F, G, H, J

--- A, E, F, G, H, I, J, K

MICROLOOP 500 FT LEAD-IN

50-PAIR COMMUNICATION CABLE, JELLY FILLED (UNDERGROUND)

MICROLOOP PROBESET

STRANDED BARE COPPER

GROUND WIRE (NO. 6 AWG)

THREE RUNS OF 1-CONDUCTOR (NO. 4 A.W.G.)

THREE RUNS OF 250 KCMil

PROPOSED 3/4 IN. X 10 FT. GROUND ROD

EXISTING 3/4 IN. X 10 FT. GROUND ROD

PS - PROPOSED UNDERGROUND POWER SERVICE

BHA. MOSHABZIBEZ

SHA MARYLAND DOT - STATE HIGHWAY ADMINISTRATION
Office of Traffic & Safety Office of Traffic & Safety

TRAFFIC ENGINEERING DESIGN DIVISION MD 355 (ROCKVILLE PIKE) @ 1-495 INNER LOOP OFF RAMP

GENERAL INFORMATION SHEET

DRAWN BY: MRB CHECKED BY: EBY SCALE: NONE DATE: MARCH, 2005

RUMMEL, KLEPPER

& KAHL, LLP

CONSULTING ENGINEERS

81 MOSHER STREET

BALTIMORE, MARYLAND 21217

L: (410) 728-2900 FAX: (410) 383-3270

F.A.P. NO. S.H.A. NO. COUNTY:

___AG-STP6-000A(59) AT7185185 <u>MONTGOMERY</u>

T.I.M.S. NO. G357

SHEET NO.

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